The Calculation of Remaining Service Life

Remaining Service Life (RSL) gives an indication of the number of years of serviceable life the structure has remaining before it has reached a "serviceability failure state". Currently within the UDOT system, a failed state is reached whenever any of the primary NBI Condition Indexes (Deck, Superstructure, or Substructure) reaches an index value of 3 out of a possible maximum index value of 9.

At present, a series of look up tables are used to estimate the remaining service life based on existing rates of deterioration. Table 1 outlines the remaining service life for various levels of condition.

Index Range	Culvert	Deck	Superstructure	Substrucrture
8.5 - 9.0	76	50	70	56
8.0 - 8.5	69	47	64	52
7.5 - 8.0	60	44	57	48
7.0 - 7.5	49	40	48	42
6.5 - 7.0	40	34	40	36
6.0 - 6.5	32	27	31	28
5.5 - 6.0	26	20	25	21
5.0 - 5.5	21	15	19	16
4.5 - 5.0	17	11	15	12
4.0 - 4.5	14	7	10	8
3.5 - 4.0	10	5	7	5
3.0 - 3.5	7	3	3	2
2.5 - 3.0	5	1	0	0
2.0 - 2.5	2	0	0	0
1.5 - 2.0	0	0	0	0
1.0 - 1.5	0	0	0	0
0.5 - 1.0	0	0	0	0
0.0 - 0.5	0	0	0	0

Table 1: RSL Values for Index Ranges